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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,604	11/10/2003	Shunpei Yamazaki	0553-0381	6065

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EXAMINER

LIN, JAMES

ART UNIT PAPER NUMBER

1762

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08/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/705,604	Applicant(s) YAMAZAKI ET AL.	
	Examiner Jimmy Lin	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 4,5,8,9,12,13,18,19 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,7,10,11,14-17 and 20-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-7, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al. (U.S. Publication No. 2002/0075422, as provided by Applicant) in view of Kawase (GB 2,360,489) and Morii (JP 2001-276726).

The rejection is of record in the Office Action filed 5/16/2007.

3. Claims 1-3, 6-7, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa (U.S. Publication No. 2003/0166311) in view of Sekiya (JP 2003-264072). The rejection is of record in the Office Action filed 5/16/2007.

4. Claims 10-11 and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura '422 in view of Kawase '489 and Morii '726 as applied above, and further in view of Miyashita et al. (U.S. Publication No. 2002/0155215).

The rejection is of record in the Office Action filed 5/16/2007.

5. Claims 10-11 and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa '311 in view of Sekiya '072 as applied above, and further in view of Miyashita '215.

The rejection is of record in the Office Action filed 5/16/2007.

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6. Claims 16-17 and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura '422 in view of Kawase '489 and Morii '726 as applied above, and further in view of Yamazaki (U.S. Publication No. 2002/0164416).

The rejection is of record in the Office Action filed 5/16/2007.

7. Claims 16-17 and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa '311 in view of Sekiya '072 as applied above, and further in view of Yamazaki '416.

The rejection is of record in the Office Action filed 5/16/2007.

8. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura '422 in view of Kawase '489, Morii '726, and Miyashita '215 as applied to claims 10-11 above, and further in view of Konuma et al. (U.S. Publication No. 20020030443).

The rejection is of record in the Office Action filed 5/16/2007.

9. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa '311 in view of Sekiya '072 and Miyashita '215 as applied to claims 10-11 above, and further in view of Konuma '443.

The rejection is of record in the Office Action filed 5/16/2007.

10. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura '422 in view of Kawase '489, Morii '726, and Yamazaki '416 as applied to claim 16-17 above, and further in view of Konuma '443.

The rejection is of record in the Office Action filed 5/16/2007.

11. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa '311 in view of Sekiya '072 and Yamazaki '416 as applied to claim 16-17 above, and further in view of Konuma '443.

The rejection is of record in the Office Action filed 5/16/2007.

Response to Arguments

12. Applicant's arguments filed 8/15/2007 have been fully considered but they are not persuasive.

Claims 1-3, 6-7, and 22-28 as rejected over Kimura '422, Kawase '489, and Morii '726:

The Applicant argues on pg. 3 that Morii only teaches ink injection onto a substrate first and then placement of the substrate under reduced pressure, while the claims require "ejecting a solution...under a pressure lower than atmosphere pressure". However, the teachings of Kimura, Kawase, and Morii must be considered as a whole. Kawase teaches the advantage of increasing the drying speed of the deposited material *during* ink ejection. Morii teaches that it is well known that a reduced pressure atmosphere can increase drying speed. Therefore, the teachings of Kawase and Morii together would suggest to one of ordinary skill in the art to perform ink ejection under a vacuum to achieve the advantages as taught by Kawase.

Claims 1-3, 6-7, and 22-28 as rejected over Miyazawa '311 and Sekiya '072:

The Applicant argues on pg. 4 that the foreign priority date of the present application is prior to the publication date of the Japanese reference to Sekiya and, thus, Sekiya cannot be considered prior art to the present application. However, the Applicant has not provided a certified translation of the foreign priority document as evidence that the claims are commensurate in scope with the priority document.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Lin whose telephone number is 571-272-8902. The examiner can normally be reached on Monday thru Friday 8AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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TIMOTHY MEEKS
SUPERVISORY PATENT EXAMINER